

## AORTA CROSS CLAMP ASSEMBLY

### ABSTRACT

An aorta cross clamp assembly includes a clamp having movable jaws and a removable actuator having movable handles. Initially, the actuator is connected to the clamp with the jaws in an open position. When the actuator handles are closed, the jaws also will be closed. The clamp is provided with a toothed retainer that prevents the jaws from being opened accidentally. The actuator can be detached from the clamp and removed from the operative site, leaving the locked clamp in place. When it is desired to remove the clamp, the actuator can be reattached to the clamp and used to disengage the toothed retainer. The actuator then can be used to spread the jaws in order to permit the clamp to be removed. The clamp and the actuator are provided in two forms. In one form, the toothed retainer is engaged and disengaged by movement toward and away from the jaws ("horizontal" movement). In the other form, the toothed retainer is engaged and disengaged by movement generally perpendicular to the jaws ("vertical" movement). Another embodiment employs a clamp having movable jaws and a slender, flexible, actuator that is not intended to be removed during use. The jaws are actuated by axial movement of a screw that is connected to the end of a cable included as part of the actuator. The screw passes through a slotted nut that permits non-rotational axial movement of the screw in one direction to close the jaws, but which requires that the screw be rotated in order to move in the opposite direction to open the jaws.